

Colorado Water Availability Task Force

TO: Members of the Colorado Water Availability Task Force

FROM: Brad Lundahl, Water Availability Task Force Chair

DATE: July 17, 2003

SUBJECT: Minutes of the Wednesday, July 16, 2003, Task Force Meeting

The meeting was held on Wednesday, July 16, 2003, at the CSU Foothills Campus in Fort Collins, Colorado. Those in recorded attendance included: Brad Lundahl, Odie Bliss, Keith Vander Horst, Klaus Wolter, Bob Glancy, Mike Gillespie, Roger Pielke, Sr., Jack Truby, Scott Archer, Brett N. Rodewald, Reagan Waskom, Travis Tucker, Barry Cress, Joe Lambert, Wendy Schultz, Mary Halstead, Randal Ristau, Joe Busto, Bill Hansen, Scott Davis, Joey Bunch, Lori Ozzello, YoungHee Kim, Rob Wawrsinski, John Gordon, and Kathie Hepp-Lucki.

Meeting began at 11:12 a.m.

Brad Lundahl, Colorado Water Conservation Board, WATF Chair

Brad Lundahl welcomed the group to the meeting and requested everyone state their name and organization. Mr. Lundahl distributed a survey regarding the water availability task force meetings and asked they be returned to him by the end of the meeting. Mr. Lundahl announced that Bob McLavey, Department of Agriculture, had retired and that Kristen Corash, OSPB, had accepted another position and would not be attending the WATF meetings.

John Swartout, Governors Office

There was not a report from the Governor's office for this meeting; Mr. Swartout wasn't able to attend the meeting. However, Travis Tucker was present from the Governor's Office.

Mike Gillespie, Natural Resource Conservation Service (NRCS)

Mr. Gillespie reported that as of July 1, 2003 the snowpack levels were at 32% of average. He explained our daily peak was April 10 at 93% of average. The melt out was nearly a month earlier than average. Mr. Gillespie stated that we were still in a .67-inch snowpack deficit. He said we are at 3% of average for July thus far, and that July looks dry.

Mr. Gillespie explained that our river basins' reservoir storage recovered well. The South Platte is at 82% of average, the Colorado at 93%, Gunnison at 81%, and the Rio Grande at only 32% of average, which was the lowest in the state. Overall statewide we were at 77%. He reported that statewide now we have an improvement overall in the last 12 months. Mr. Gillespie said that just about every basin is better than last year at this time; however we still have a million acre feet deficit still remaining, which is better than the deficit of last year. Statewide reservoir

storage is recovering, but we would need another year like this last year to bring us up to average. Mr. Gillespie mentioned that the low water demands in June helped to restore our reservoirs.

Jack Byers, Deputy Director, Division of Water Resources

Keith VanderHorst (Div. of Water Resources) presented the “major reservoir capacity” map for Mr. Byers. This map indicates the maximum and current (as of June 25) water levels of various reservoirs across the state. The map handouts were also distributed at the meeting.

Keith VanderHorst, Division of Water Resources, Water Supply Conditions Update

Mr. VanderHorst reported that Colorado’s water supply has improved considerably from last year, but that our total water supply is still below average. All basins show an increase from last year; however, the southwest part of the state did not receive the snow runoff as the other parts of the state. The first half of June we had good precipitation; however the end of the month was much drier. The SWSI indicates that the Rio Grande basin is in the worse shape, while the South Platte basin is in the best shape.

Stream-flow gauges are below normal, but better than last year. Mr. VanderHorst said the Rio Grande basin is hoping for rainfall this summer; the Gunnison basin is looking forward to summer runoff; the Yampa basin has hot and dry conditions with no precipitation expected during the second half of last month. The stream flows are in below average condition. The San Juan basin has hot and dry conditions, and stream flows peaked early

The following is a brief water supply conditions update. (A complete supply update was distributed at the meeting.)

South Platte Basin

SWSI value (0.4) indicates that for June the basin water supplies were near normal. Reservoir storage was 81% of normal as of the end of June. Storage levels in the major plains reservoirs: Julesburg, North Sterling, and Prewitt are at 96% of capacity. Cumulative storage in the major upper-basin reservoirs of Cheesman, Eleven Mile, Spinney, and Antero is at 63% of capacity.

Arkansas Basin

SWSI value (-0.9) indicates that basin water supplies were slightly below normal for June. Streamflows continued to be fairly strong during the month of June. Storage in Turquoise, Twin Lakes, Pueblo, and John Martin reservoirs totaled 53% of normal at the end of June.

Rio Grande Basin

SWSI value (-3.4) indicates that basin water supplies were well below normal in June. At the end of June all streams were near base flow condition. The volume of runoff was far better than June of 2002; however, the runoff was enhanced by reservoir releases leaving the upper basin with very little carryover reservoir storage. Precip was near normal. Soil moisture conditions are getting worse.

Gunnison Basin

The SWSI value (-2.4) indicates that June basin water supplies for the Gunnison Basin were below normal. Streamflows are below normal. Since late May and early June, the flows have dropped sharply; therefore the flows for the summer months are likely to be low unless supplemented by rainfall. Storage in Taylor Park, Crawford, and Fruitland reservoirs totaled 82% of normal as of the end of June.

Colorado Basin

The SWSI value (-1.6) indicates that June basin water supplies were slightly below normal. The end of June found very little remaining snowpack; stream levels have dropped to below average through much of the basin. Storage in Green Mountain, Ruedi, and Williams Fork reservoirs totaled 106% of average at the end of June.

Yampa/White Basin

The SWSI value (0.0) indicates that the June basin water supplies were near normal. Warmer than normal temperatures at the beginning of June caused a rapid melt of the high elevation snowpack. Stream flows throughout rose rapidly to above average levels, but by the end of June most stream flows were below normal.

San Juan/Dolores Basin

The SWSI value (-2.6) indicates that June water basin supplies were below normal. There was not a significant runoff from the upper level snowpack. Stream flows peaked in May and dropped steadily through June. Reservoirs reached higher levels from early runoff; however were tapped significantly and held far less than average at the end of June. Storage in Lemon reservoir totaled 39% of normal the end of June.

Roger Pielke, State Climatologist

Mr. Pielke explained that the western United States ranked high in the global prospective for drought and dry conditions. Also included was a statewide average for Colorado, even though the statewide concept is misleading. Statewide June 18th was reported to be the wettest, while 1992 was the driest June on record. Mr. Pielke believes the basin concept is much more accurate. In the last month, the northeast part of the state had more precipitation causing wetter conditions while the southwest part of the state is dry; however, most of the state is having an above average water year. He said the southwest part of the state is not out of the drought, and we all could fall right back into the drought if it gets dry again with hot temperatures and little or no precip. Also, brush fires will be a threat in the next couple of weeks if we don't get moisture.

Bob Glancy, National Weather Service, Short Term Weather Forecast

Mr. Glancy reported that Denver has had only two days this far in July when the temperatures have been below 90 degrees. We are running 3-4 degrees above normal so far this July. He indicated that with an average summer, things will start to moisten up. We will have some dry lightning storms, which can cause extreme fire danger. Mr. Glancy said with the hot conditions we have had, we have extreme fire danger in the southwest and western part of the state, very high fire danger in the north central and south central part of the state, and the southeast is very hot. Lightning starts many fires throughout the whole state. Typical Colorado summers indicate flash flood threats in late July. It is possible that we will transition from a dry hot ridge to a stable moist ridge in the next couple of weeks. It will be fairly hot later. Mr. Glancy said a weak

cold front is expected later in the week. Temperatures could drop five to ten degrees with increasing chances of thunderstorms. The forecast is 99 degrees for today, but next week we should be in the lower 90's. Other parts of the state could get even hotter next week. Mr. Glancy reported that the long-term forecast shows we have a better chance of showers and thunderstorms in the next two weeks. Dry lightning is expected to start fires in the next couple of days. He expects a hot July and dry August.

Klaus Wolter, NOAA Climate Diagnostic Center, Long Term Weather Outlook

Mr. Wolter said that two weeks of very hot weather is all it takes to cause drought problems again and crops to dry up. He mentioned that El Nino is good for Colorado. Mr. Wolter explained there is a low chance of moisture for the San Luis Valley during the rainy season of summer, and that he sees no change for the eastern part of the state. He said La Nina is not coming unless in the winter or late fall and that La Nina tends to be dry.

The following executive summary has been added to the minutes:

"Executive summary (18 July 2003)"

1. As of mid-July 2003, the most recent El Niño event - declared over last month - is trying to make a comeback. Developing La Niña conditions for the previous two months have been effectively erased by resurgent warmth in the central and eastern Pacific, probably due to a well-timed and well-placed intraseasonal (Madden-Julian-) oscillation. Near-neutral conditions are the safest bet for the next few months, but I would not be surprised to see renewed El Niño conditions by next winter. Therefore, the scenario of back-to-back El Niño winters is very much alive, as hoped for in earlier assessments of the situation.

2. Historically, El Niño has been associated with wetter than average conditions in Colorado during the fall season, drier than normal winters, and wetter than average springs. This seasonal cycle appears particularly pronounced for the northeastern part of the state, while the Arkansas Valley tends to receive above-normal precipitation throughout the year during El Niño conditions. Considering the overall impacts of this El Niño event on U.S. weather, northeast Colorado indeed stands out as a 'poster child' during 2002-3 (three correct forecasts for three seasons), while southern Colorado (in particular, the San Juans) appears somewhat "neglected", especially during this spring. As expected, one El Niño event was not sufficient to completely alleviate the drought situation in Colorado, but it came awfully close over the northern portion of the state where it helped to refill many reservoirs.

3. The dry and hot June that appeared a threat for eastern Colorado did not materialize. Or should I say that the heat got a bit delayed? Through the first 17 days of the month, July is trying hard to beat last year's heat wave, and the monsoon has been slow in establishing itself from Arizona to Colorado. However, the recent heat may very well have peaked this week (over Colorado), and moisture has returned to the state both from the east and from the south. The most recent experimental forecast continues to advertize above-normal rainfall for eastern New Mexico in July through September. Some of that excess moisture should work its way into eastern Colorado as well, although that tilt in the odds is not as pronounced as further south. The western two thirds of Colorado as well as Arizona and Utah show much less inclination towards a wet or dry monsoon season than the eastern plains. I am concerned about

the San Luis valley in particular, since it has recovered the least from recent drought conditions, derives a lot of its annual moisture from the summer monsoon, and now faces the lowest odds of a wet summer in the interior southwestern U.S.

4. Bottomline: Consistent with El Niño expectations, Colorado experienced a wet fall, a dry winter, and a wet spring in much of the state. Compared to Arizona and New Mexico, Colorado has staged a good recovery from last year's severe drought. For the remainder of summer, (July-September), the likelihood of renewed drought conditions is slightly enhanced over south-central Colorado into New Mexico, but the eastern plains of New Mexico and Colorado have a good chance of fairing better (wetter) than average in the upcoming months. Should El Niño complete its comeback this fall, much of the southwestern U.S. would have a decent shot at recovering further from the drought."

Impact Task Force Reports

Barry Cress, Department of Local Affairs

Mr. Cress stated that the water systems were not having many problems like they had last year. He said that most systems that were having problems last year ended up getting the funding they needed. They received financial help through the Department of Health, Colorado Water Conservation Board, and the Department of Local Affairs. Mr. Cress also mentioned that there was money available from a Water Quality grant for those people who had drought related water problems. July 15, 2003 was the deadline for the "SET" grant money. Mr. Cress said there were quite a few applications and the money would be allocated in the next couple weeks.

Joe Lambert, Energy

Mr. Lambert reported that the energy failures were not drought related, but demand only because of the hot heat. He also said the fire danger was not near where it was last year.

Mary Halstead, Wildlife

Ms. Halstead reported that DOW was reprioritizing their fish stock. They lost some fish from the heat but nothing to significant. The fawn production is down; there aren't as many fawns this year as last year, but the fishing is good.

Brett Rodewald, Colorado Parks Recreation Assn.

Mr. Rodewald reported that the athletic fields didn't have to be closed because of the moisture from the big snowstorm. The heat is beginning to affect the park lawns, but they are working with the different water restrictions.

Agriculture

Reagan Waskom, CSU Cooperative Extension, gave us an agriculture update. He stated that there was an increase in irrigated wheat for this year and that it was looking good. Last year we harvested the weakest crop since 1968. He indicated the northeaster and central plains wheat crop was good, and the farmers had made an adjustment to grow wheat instead of corn because

of the drought conditions. Mr. Waskom mentioned that the range land was in good condition in northern and eastern Colorado and that it had recovered a lot faster than expected; however, the San Luis Valle is still in poor condition.

Dept of Health (Carl Norbeck)

There was no report from the Department of Health at this task force meeting.

Stephanie Delgar, Tourism

There was no report on tourism at this meeting.

Wendy Schultz, OSPB, Economic

Ms. Schultz is the new water availability task force member for economics. She will have a report for us at the next meeting.

Wildfires

Scott Davis (the Bureau of Land Management) gave a short report on wildfires. He mentioned that there is always fire danger associated with the hot temperatures of the last couple of weeks. Mr. Davis indicated that the drought has still caused a large insect disease in the Pinion trees and that wood chips are now being considered for heating. He gave out the following web address (www.nfc.gov/fireinfo) for checking on wildfire information.

Bob Steger, Denver Water

There was no report for Denver Water at this meeting.

NEXT MEETING

The next meeting is being planned for September 24, 2003 at 1:00 in Boulder, Colorado.

Meeting adjourned at approximately 1:00 P.M.